



UNITED STATES DEPARTMENT OF COMMERCE  
Patent and Trademark Office

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| SERIAL NUMBER | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. |
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| 07/579,569 | 09/10/90 | NILSSEN | 0 |
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EXAMINER

DINH, S

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BARRINGTON, IL 60010

| CLASS | PAPER NUMBER |
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252

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DATE MAILED

06/10/91

THIS DOCUMENT CONTAINS NEITHER RECOMMENDATIONS NOR  
CONCLUSIONS OF THE PATENT AND TRADEMARK OFFICE

☐ This application has been examined ☒ Responsive to communication filed on 5/11/91 ☐ This action is made final.

A shortened statutory period for response to this action is set to expire 3 month(s), 00 days from the date of this letter.  
Failure to respond within the period for response will cause the application to become abandoned. 35 U.S.C. 133

Part I THE FOLLOWING ATTACHMENT(S) ARE PART OF THIS ACTION:

- |   |   |
|---|---|
| 1. <input checked="" type="checkbox"/> Notice of References Cited by Examiner, PTO-892. | 2. <input type="checkbox"/> Notice re Patent Drawing, PTO-948.                  |
| 3. <input type="checkbox"/> Notice of Art Cited by Applicant, PTO-1449.                 | 4. <input type="checkbox"/> Notice of Informal Patent Application, Form PTO-152 |
| 5. <input type="checkbox"/> Information on How to Effect Drawing Changes, PTO-1474.     | 6. <input type="checkbox"/>   |

Part II SUMMARY OF ACTION

1. ☒ Claims 1-12, 19-24 are pending in the application.  
Of the above, claims 13-18 are withdrawn from consideration.
2. ☐ Claims \_\_\_\_\_ have been cancelled.
3. ☐ Claims \_\_\_\_\_ are allowed.
4. ☒ Claims 1, 8-12, 19-21, 22-24 are rejected.
5. ☒ Claims 2-7 are objected to.
6. ☐ Claims \_\_\_\_\_ are subject to restriction or election requirement.
7. ☐ This application has been filed with informal drawings under 37 C.F.R. 1.85 which are acceptable for examination purposes.
8. ☐ Formal drawings are required in response to this Office action.
9. ☐ The corrected or substitute drawings have been received on \_\_\_\_\_. Under 37 C.F.R. 1.84 these drawings are ☐ acceptable; ☐ not acceptable (see explanation or Notice re Patent Drawing, PTO-948).
10. ☐ The proposed additional or substitute sheet(s) of drawings, filed on \_\_\_\_\_, has (have) been ☐ approved by the examiner; ☐ disapproved by the examiner (see explanation).
11. ☐ The proposed drawing correction, filed \_\_\_\_\_, has been ☐ approved; ☐ disapproved (see explanation).
12. ☐ Acknowledgement is made of the claim for priority under U.S.C. 119. The certified copy has ☐ been received ☐ not been received ☐ been filed in parent application, serial no. \_\_\_\_\_; filed on \_\_\_\_\_.
13. ☐ Since this application appears to be in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11; 453 O.G. 213.
14. ☐ Other

EXAMINER'S ACTION

Art Unit 252

The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --  
(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 1, 8-12, 19-21, 24 are rejected under 35 U.S.C. § 102(b) as being clearly anticipated by Pitel (patent #4.045,711).

Claims 2-7 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim 12 is rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Applicant sets that the inductance is measured when no current is flowing and thus has a first magnitude or first value. Applicant also states that the inductance has a second magnitude or second value when a short circuit is placed across the auxiliary winding. Note that the "second magnitude" is not measured. This above terminology is unclear and indefinite for an inductor has a different inductances unless it is a variable inductor, no such variable inductor is set forth in the specification or claim. This terminology is

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also unclear for "reactance" can change with frequency but not inductance.

The following is a quotation of 35 U.S.C. § 103 which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Subject matter developed by another person, which qualifies as prior art only under subsection (f) or (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

Claims 22-23 are rejected under 35 U.S.C. § 103 as being unpatentable over Pitel '711 in view of Pitel '478. Pitel '711 applied as above. The use of an inverter having a non-sinusoidal waveform output and the current flowing through the inductor has a substantially sinusoidal waveform output and the current flowing through the inductor has a substantially sinusoidal waveform is well known in the art as indicated in Pitel 476, column 1, lines 47-56. Thus, it would have been obvious to modify Pitel '711 by converting a non-sinusoidal waveform at inverter output to a substantially sinusoidal waveform so as to drive a lamp as well known in the art.

Serial No. 579569

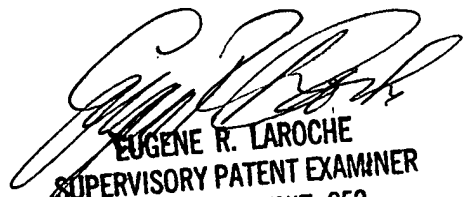
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The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. 1) Leale discloses an electronic ballast employing an electronic inverter which drives a main power transformer across the output of which terminations are connected for a plurality of fluorescent lamps. 2) Kohler teaches an electronic ballast using a push-pull inverter and a series resonant circuit for driving a lamp. 3) Paget discloses a lamp ballast having the oscillator frequency appears to depend on the applied voltage. 4) Wallace discloses a control circuit for providing regulated current to lamp load.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Son Dinh whose telephone number is (703) 308-3185.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0956.

  
EUGENE R. LAROCHE  
SUPERVISORY PATENT EXAMINER  
GROUP ART UNIT 252

S. DINH:th *SD*  
June 06, 1991